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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,027	11/24/2003	Karl-Ernst Hummel	100690.52863US	9152
23911	7590	08/04/2004	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			TRIEU, THAI BA	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/719,027	<b>Applicant(s)</b> HUMMEL, KARL-ERNST	
	<b>Examiner</b> Thai-Ba Trieu	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/10/2004</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

1. "TURBOCHARGER WITH SOUND/NOISE/VIBRATION ABSORBING INSULATING MATERIAL".
2. "TURBOCHARGER WITH SOUND/NOISE/VIBRATION ABSORBING ARRANGEMENT".
3. "TURBOCHARGER WITH SOUND/NOISE/VIBRATION ABSORBER".

### *Claim Objections*

Claims 1-11 are objected to because of the following informalities:

- Line 1, "**A secondary air turbocharger**" should be replaced by -- **A turbocharger--**, since the instant application just relates to the detailed structure of a turbocharger for an internal combustion engine having a portion of a housing being enclosed externally by a sound absorbing insulating material.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the recitation of "a secondary air turbocharger" render the claim indefinite, since it not clear that why the applicant discloses and claims a turbocharger as a secondary air turbocharger

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claims 1-2, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over O' Neill (Patent Number 3,845,619), in view of Wirth (Patent Number WO 97/48943).***

Regarding claims 1-2 and 7-8, O' Neill discloses a turbocharger for an internal combustion engine of a motor vehicle, said turbocharger comprising a turbine (2) and a compressor (1) (See Figure 1),

wherein a turbine wheel (Not Numbered) of the turbine (2) and a compressor wheel (Not Numbered) of the compressor (1) are mounted on a rotatable common shaft

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(3) supported by a bearing assembly (11, 12, 13, ball bearings on the side of the compressor 1) inside a turbocharger housing; said bearing assembly comprising at least one roller bearing (ball bearings on the side of the compressor 1), and at least a portion of the housing being enclosed externally in the area of the bearing assembly by an absorbing insulating material (14) (See Figure 1);

wherein the turbocharger housing has a smaller diameter in the area of the bearing assembly than in the area of the turbine (2) and the compressor (1) (Clearly seen in Figure 1), and the insulating material (14) encloses the area of the bearing assembly between the turbine (2) and the compressor (1) (See Figure 1);

However, O' Neill fails to disclose an absorbing insulating material being a sound absorbing insulating material containing at least one fiber selected from the group consisting of glass fibers and mineral fibers; and a shell externally enclosing the insulating material.

Wirth teaches that it is conventional in the thermal and acoustic insulation of turbochargers and exhaust systems of high speed diesel engine art, to utilize a sound absorbing insulating material (1,2) containing at least one fiber selected from the group consisting of glass fibers and mineral fibers; and a shell (5) externally enclosing the insulating material (See Figure 1, Abstract and Use of the attached copy).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a sound absorbing insulating material containing at least one fiber selected from the group consisting of glass fibers and mineral fibers; and

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a shell externally enclosing the insulating material, as taught by Wirth, to improve the vibration absorption of the O' Neill device.

**Regarding claim 9**, the modified O' Neill device discloses the invention as recited above; however, fails to disclose the shell being provided as a mold into which a synthetic resin foam is injected.

The recitation of "the shell being provided as a mold into which a synthetic resin foam is injected" is a product by process claim, which is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to overcome forward with evidence establishing a obvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

***Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over O' Neill (Patent number 3,845,619), in view of Wirth (Patent Number WO 97/48943), and further in view of Fukasaku et al. (Patent Number 5,199,846).***

The modified O' Neill device discloses the invention as recited above; however, fails to disclose the insulating material comprising a synthetic resin foam, and a polyurethane foam.

Fukasaku teaches that it is conventional in the noise suppressing arrangement art to utilize the insulating material comprising a synthetic resin foam, and a polyurethane foam (See Column 7, lines 24-37).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the insulating material comprising a synthetic resin foam, and a polyurethane foam, as taught by Fukasaku, since the use thereof would have reduced the noise in the modified O' Neill device.

***Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over O' Neill (Patent number 3,845,619), in view of Wirth (Patent Number WO 97/48943); and further in view of Doll Manfred et al. (Patent Number DE 100 22 052 C2).***

The modified O' Neill device discloses the invention as recited above; however, fails to disclose the shell comprising two inter-connectable half shells; and the two half shells are constructed as a one piece.

Doll Manfred teaches that it is conventional in turbine case for exhaust gas turbocharger art, to utilize the shell (20) comprising two inter-connectable half shells (22 and 23, or 122 and 123); and the two half shells are constructed as a one piece (See Figures 1, 4, 7, and Abstract).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the shell comprising two inter-connectable half shells, as taught by Doll Manfred, since the use thereof

The recitation of "the two half shells being constructed as a one piece injection-molded synthetic resin component, and being joined by a film hinge in the area of a parting line and having at least one snap connector in the area of an opposite parting

line" is a product by process claimed limitation, which is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to overcome forward with evidence establishing a obvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

### ***Allowable Subject Matter***

Claims **3 and 6** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The IDS (PTO-1449) filed on May 10, 2004 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Knorner (Pub. Number US 2004/0109759 A1) discloses a housing for a turbocharger.
- Tinker (US Patent Number 4,508,486) discloses a ventilation fan having a noise attenuating housing.
- Traver et al. (US Patent Number 4,504,188) discloses a pressure variation absorber.



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- Devers et al. (US Patent Number 3,928,963) disclose cast in place gas turbine containment ring and method of manufacture.

- Amann et al. (US Patent Number 3,849,022) disclose a turbine blade coolant distributor with a rear bulkhead being cover by a layer of thermal insulating material to isolate the chamber from the exhaust side of the assembly.

- Oetliker (Patent Number 3,310,940) discloses a gas turbine having a liner of a heat resistant material, preferably a high temperature alloy back by insulation.

- Zeek (Patent Number 3,256,689) discloses cooling system for a turbine.

- Birmann (US Patent Number 3,059,415) discloses a turbocharger for internal combustion engine having concentric ceramic fillers and a temperature-resistant plastic filler.

- Einbeck Harro et al. (Patent Number DE 24 46 834 A1) disclose heat-insulation gas turbine.

- Shimada (Patent Number JP 58143043 A) discloses a motor driven blower having sound absorbing material portion.

- Bowens (Patent Number DD 123140 A) discloses thermally insulating and sound absorbent cladding for a steam turbine, with filler between the turbine and cladding of flowing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB  
July 23, 2004



Thai-Ba Trieu  
Patent Examiner  
Art Unit 3748